

## CLAIMS

1. A remote servicing communication system for in-field product comprising:
- at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely;
- 5 an in-field product at a customer site that is not readily capable of direct communication with the on-line center;
- at least one portable service interface operable with the in-field product at the customer site and having software for communication with the on-line center;
- a first communications link connecting the portable service interface to
- 10 the on-line center; and
- a second communications link connecting the portable service interface with the in-field product to complete a connection between the in-field product and the on-line center through the portable service interface.
2. The system of claim 1 wherein the connection between the in-field product and the on-line center is utilized to conduct a diagnostic evaluation of the in-field product.

3. The system of claim 1 wherein the in-field product is a medical image scanner and the on-line center contains service software designed for utilization with a wide variety of medical image scanners, and wherein after the portable service interface sends a data message identifying the medical image scanner, the on-line center selects  
5 service software based on the medical image scanner identification and automatically downloads the selected service software to the medical image scanner or executes the selected service software from the portable service interface.

4. The system of claim 1 wherein the connection between the in-field product and the on-line center is utilized to access data from the on-line center.

5. The system of claim 4 wherein the accessed data from the on-line center includes at least one of a configuration file, a golden file, a protocol and a software program.

6. The system of claim 1 wherein the portable service interface sends a data message signal to the on-line center identifying the in-field product such that the on-line center selects service software specifically designed for the in-field product.

7. The system of claim 1 wherein the second communication link connecting the portable service interface to the in-field product is one of a serial cable and a local area network cable.

8. The system of claim 1 wherein the portable service interface is a laptop computer having loaded therein remote resource communications software to automatically communicate with the on-line center and transfer data therebetween.

9. The system of claim 1 wherein the connection to the on-line center provides access to a remote on-line support engineer to provide real time assistance with the in-field product through the portable service interface.

10. A method of providing remote service communication between an on-line center and an in-field product at a customer site where the in-field product is not readily capable of direct communication with the on-line center comprising:

- loading on-line center connectivity software on a portable service interface;
- 5 connecting the portable service interface to the in-field product;
- electronically connecting the on-line center with the portable service interface;
- accessing data from the in-field product with the portable service interface; and
- interfacing between the on-line center and the in-field product with the portable service interface.

11. The method of claim 10 further comprising the steps of transmitting data identifying the in-field product to the on-line center for evaluating and servicing the in-

field product, and automatically selecting service software at the on-line center, and generating in-field product evaluation information and displaying the in-field product evaluation information on the portable service interface.

12. The method of claim 10 wherein the interfacing step includes accessing data from the on-line center including at least one of a configuration file, a golden file, a protocol and a software program.

13. The method of claim 10 wherein the in-field product is a medical image scanner and further comprises automatically selecting at the on-line center service software based on a specific identification of the medical image scanner.

14. The method of claim 10 further comprising the step of automatically checking whether a field service engineer requests an analysis/evaluation, and if so, transmitting system data to the in-field product and performing an analysis/evaluation of the in-field product.

15. The method of claim 14 further comprising displaying results of the analysis/evaluation so that the field service engineer can monitor the analysis/evaluation.

16. The method of claim 10 wherein the connecting step further includes connecting the portable service interface to the in-field product by one of a serial cable and a local area network cable.

17. The method of claim 10 further comprising the steps of automatically checking to see whether a field service engineer requests access to remote resource information, and if so, downloading the remote resource information to the in-field product.

18. The method of claim 17 further comprising the step of displaying a remote resource information to the in-field service engineer.

19. The method of claim 10 wherein the electronically accessing step occurs through a global computer network system.

20. The method of claim 10 wherein the electronically connecting step further includes providing access to a remote on-line support engineer to provide real time assistance with the in-field product through the portable service interface.

21. A method of servicing an in-field product not readily capable of direct communication with a remote on-line center comprising:

providing a portable service interface having software for communication with an on-line center;

5 connecting the portable service interface to the in-field product;  
electronically connecting the on-line center with the portable service interface;

10 from the portable service interface, selecting at least one servicing function available from the on-line center resulting in at least one of the following:

interfacing the in-field product with the on-line center through the portable service interface to conduct a diagnostic evaluation of the in-field product;

15 downloading information to the in-field product from the on-line center through the portable service interface; and

displaying one of the diagnostic evaluation and the downloaded information on the portable service interface as a result of the selecting step.

22. The method of claim 21 wherein the in-field product is a medical image scanner and further comprising the steps of transmitting a data message identifying the medical image scanner from the portable service interface to the on-line center, automatically selecting service software at the on-line center based on the medical image

scanner identification, and automatically downloading the selected service software to the medical image scanner.

23. The method of claim 21 further comprising the steps of automatically checking whether a field service engineer requests an analysis/evaluation, and if so, transmitting system data to the in-field product and performing an analysis/evaluation of the in-field product, and displaying results of the analysis/evaluation so that the field service engineer can monitor the analysis/evaluation.

24. The method of claim 21 further comprising the steps of automatically checking to see whether a field service engineer requests access to remote resource information, and if so, downloading the remote resource information to the in-field product, and displaying a remote resource information to the in-field service engineer.